## ABSTRACT

An adjustable eddy electrostatic precipitator, comprising a main body, an electrode array, an adjustable opening and a precipitating device. The main body has an inner space with an air guiding plate of helical shape, an entrance for air and an exit for air. The electrode array is placed close to the entrance, ionizing air as well as particles floating therein. The adjustable opening is located at the exit, having an adjustable aperture. The precipitating device is connected with a bias high voltage for adsorbing ionized particles. Air entering the main body through the entrance is ionized, ionizing particles floating therein. Ionized particles are driven towards a single zone and are collected depending on size and charge in an adjustable manner.

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